reasons: that a certain amount of indefiniteness is desirable for future development, and that one line of cleavage might suit one library while it would not appeal to another. No matter how carefully a scheme is prepared, development is bound to be needed in unexpected places, and these must be provided for by the individual libraries or through some central organization. Clearly it is in the interest of uniformity that such decisions should be made in advance whenever possible. I freely admit that different types of libraries prefer different treatment of material, but even here it seems to me better to express a preference for one plan over the other.

I may sum up by asking that a scheme of classification include its own commentary. The eagerness with which classifiers welcome an authoritative list of works classed under the scheme they favor, and the diversity discovered when usage of various libraries is compared, proves the need of this, if it is granted that a national or widely used scheme of classification is desirable at all.

Another general criticism: Shall we classify by topics or by aspects? Classifications, as found in use, are ill provided with general numbers for subjects where the general popular works and the encyclopedic treatises may go without forcing us to weigh each contribution of the sort carefully in order to discover which side receives the fullest treatment in that particular instance.

CLASSIFICATION

By J. CHRISTIAN BAY, *Chief Classifier, The John Crerar Library, Chicago*

To build a classification system requires a mental activity and a practical sense similar to what is required in the planning and building of a house. Both structures are aimed to be used by live humanity. The books at our elbow contain the first suggestion for their systematic arrangement. A second suggestion is contained in the history of the subjects of which they treat. Another helpful hint is contained in the purpose and the actual use of that library through which the books are offered for public use.

Time was when the patrons of a library seemed quite unconcerned about the professional art of the librarian. We have inherited from that time a system of cataloging which fails much in conveying an adequate impression of the books to the minds of the readers. In the building of classification schemes, we now are awake to the fact that books can be arranged so that readers endowed with good will and ordinary intelligence can comprehend the result. But the *use* of a library contains many a valuable suggestion for the classification scheme.

This suggestion serves as a useful counter-irritant to that tendency toward a hermetic and sacred exclusiveness which develops in almost any profession. Many of us undoubtedly have constructed classification schemes in the spirit that we were organizing the science, or subject, and putting its literary monuments in order, as if we were arranging a bibliography. This is a noble ambition, but it may mislead us entirely. Even the most systematic arrangement of subjects within a science or an art may fail to locate properly many of the very books we are striving to accommodate.

One of the first requisites in classification building seems to be determining the natural place of the library's books as viewed by the relative locality of the subject and the use of the books. This means a logical balance between a scientifically defensible arrangement and the anticipated use. This balance can be struck only

by an experiment, or a series of experiments. The logical sequence of subjects usually is easy to attain and needs no experiment, but the experiment brings out all the natural groups of books not anticipated by logic, history, or system.

Another advantage of experimental development of classification schemes lies in the recognition of identical forms of books under varying names. It is possible to recognize this in the classification, but frequently we may find that the catalog, or shelf list, will admit of historical grouping far better than the shelf arrangement will.

Close classification has its great advantages, but also leaves the door open for interminable minor changes and modifications,—and, worse yet, for a minuteness so intricate that it defies even good will and average intelligence. It also brings into prominence the notation. There is a growing and justified tendency to discard unnecessarily elaborate notation schemes, and to insist on a call number which will reduce, instead of increase, the forced attention of readers and attendants to minute details not of first importance in the working of the library.

We are approaching an age when, in many classes of literature, the author entry is secondary in importance to the classification entry or to the subject heading. It is of less consequence, from a social point of view, who did the work than how it was done. In classification, similarly, it is more important, as Mr. Campbell once put it, that everything pertaining to a certain subject is kept in one pigeonhole and that pigeonhole is numbered,—this is relatively more important than that the last word on the subject, in the philosophy of science, has been heard. For the last word in philosophy of science may be recalled to-morrow, and a new consensus asked; but libraries cannot, and should not, change their classification schemes with every change in the philosophic points of view. None of us has faith in indiscriminate pigeonholing; but each and all will see the advantage of experimental development of classification groups based upon the balance between logical locality and practical use. As this is done more and more, it will be seen that the cataloging and the classification scheme may interact in such a way that an adequate presentation of books will result.

THE PROBLEM AND THE THEORY OF LIBRARY CLASSIFICATION

BY HENRY E. BLISS, *Librarian, College of the City of New York*

Where there is an unsolved problem of practical interest there is need for an applicable theory. A theory is a generalized statement of principles adduced from the facts comprehended. A problem arises in any undertaking to handle or control a complex thing in complicated relations. A problem is a question how; a theory is a first answer; a complete answer is a solution. In a difficult problem there is seldom a solution without an applicable theory. So problem and theory cannot well be treated separately. This you all know and

this you mean when you speak of going about a matter intelligently.

Now, that the problem of library classification has not yet been solved for present tendencies and probable developments even the votaries of systems in vogue are recognizing. No applicable theory has as yet been set forth clearly; no embodiment of sound principles has been established. With due regard to those present and past who have constructed serviceable systems or contributed well in their writings, this is said to emphasize the purpose with which